Opportunities for Africa's Newborns

Every year in sub-Saharan Africa 1.16 million babies die in the first month of life, and another million babies are stillborn. Recently, several large African countries have made progress in reducing *child* mortality, providing new hope for reaching Millennium Development Goal (MDG) 4 to reduce under-five mortality by two thirds between 1990 and 2015. So far there has been limited progress in reducing deaths in the first month and especially the first week of life in Africa. Up to half a million African babies die on the day they are born. Meeting MDG 4 for child survival in Africa depends on more attention and action to also reduce *newborn* mortality (read more in Section I).

According to a new analysis presented in this publication, two thirds of newborn deaths in Africa could be avoided – 800,000 lives saved each year – if essential interventions already in policy reached 90 percent of African mothers and newborns. Existing programmes present many opportunities to strengthen or integrate newborn care (read more in Section II).

Strengthening essential maternal, newborn and child health (MNCH) packages along the continuum of care as follows: (read more in Section III)
- Care for girls and women before pregnancy (chapter 1)
- Antenatal care (chapter 2)
- Childbirth care (chapter 3)
- Postnatal and newborn care (chapter 4)
- Integrated Management of Childhood Illness (IMCI) (chapter 5)
- Nutrition and breastfeeding promotion (chapter 6)

Integrating with other key programmes:
- Prevention of Mother to Child Transmission of HIV (PMTCT) programmes (chapter 7)
- Malaria control programmes (chapter 8)
- Immunisation programmes (chapter 9)

Improving linkages between households and health care:
- Empowering families and communities – increasing demand
- Ensuring quality of care in facilities – improving supply
- Encouraging innovative and effective strategies especially to reach the under served

Investment to save newborn lives also saves mothers and children (read more page 25). In the year 2004, sub Saharan African countries spent an estimated US$0.58 cents per capita on the running costs of essential MNCH packages. In many African countries, especially in West Africa, the majority is taken from the pockets of poor families. It would cost an additional US$1.39 per capita per year to provide 90 percent of women and babies in sub-Saharan Africa with all the essential heath packages. A total additional cost of approximately US$1 billion per year would be required to scale up services across the continent. This estimate includes the cost of human resources, supplies and equipment, and facility maintenance but does not include major new building costs. Only 30 percent of this total price tag is for newborn-specific interventions, so the majority of the investment has direct benefits for mothers and older children.

Poor countries are making progress – good news from Africa! Some countries have reduced newborn and under-five mortality. Six countries – Eritrea, Malawi, Burkina Faso, Madagascar, Tanzania, and Uganda have achieved neonatal mortality rates between 24 and 32 per 1,000 live births, despite a gross national income per capita under US$400 per year. Several of these countries have also reduced maternal mortality. The experiences of these countries provide valuable examples of leadership, district-based management, focus on scaling up of essential interventions and approaches to protect poor families from escalating health care costs. Several African governments have recently abolished user fees for MNCH services or for life saving interventions such as emergency caesarean sections.

Key findings The fate of African newborns, mothers and children is closely linked

WHO?	WHEN?	WHY?
Each year in Africa, 30 million women become pregnant, and 18 million give birth at home without skilled care. Each day in Africa: • 700 women die of pregnancy-related causes. • 3,100 newborns die, and another 2,400 are stillborn. • 9,600 children die after their first month of life and before their fifth birthday. • 1 in every 4 child deaths (under five years) in Africa is a newborn baby.	Birth, the first day and the first week of life are critical: risk of death peaks and coverage of care drops – half of African women and their babies do not receive skilled care during childbirth and fewer receive effective postnatal care. This is also the crucial time for other interventions, especially prevention of mother-to-child transmission of HIV and initiation of breastfeeding.	The top three causes of newborn death are infections, prematurity, and asphyxia. Low birthweight underlies the majority of newborn deaths and links to maternal health, nutrition and infections such as malaria and HIV.

A healthy newborn will change the future

Evidence based interventions to save newborn lives

Packages along the continuum of care	Care for girls and women before pregnancy	• Education with equal opportunities for girls • Nutrition promotion especially in girls and adolescents • Prevention of female genital mutilation • Prevention and management of HIV and sexually transmitted infections (STI) • Family planning
	Care during pregnancy	• Focused antenatal care (ANC) including – At least 2 doses of tetanus toxoid vaccination (TT2+) – Management of syphilis/STIs – Management of pre-eclampsia – Intermittent preventive treatment for malaria in pregnancy (IPTp) and insecticide treated bednets (ITN) – Prevention of mother-to-child transmission of HIV • Birth and emergency preparedness at home, demand for care
	Childbirth care	• Skilled attendance at birth • Emergency obstetric care • Improved linking of home and health facility • Companion of the woman's choice at birth • Where there is no skilled attendant, support for clean childbirth practices and essential newborn care (drying the baby, warmth, cleanliness and early exclusive breastfeeding) at home
	Postnatal care	• Routine postnatal care (PNC) for early identification and referral for illness as well as preventive care: – For the mother: Promotion of healthy behaviours, danger sign recognition and family planning – For the baby: Promotion of healthy behaviours – hygiene, warmth, breastfeeding, danger sign recognition and provision of eye prophylaxis and immunisations according to local policy • Extra care for small babies or babies with other problems (e.g. mothers with HIV/AIDS)
	Integrated management of childhood illness (IMCI)	• Management and care of low birthweight (LBW) babies including Kangaroo Mother Care (KMC) • Emergency newborn care for illness especially sepsis
Cross cutting programmes	Nutrition and breastfeeding promotion	• Nutrition promotion especially in girls and adolescents • Maternal nutrition during pregnancy • Early and exclusive breastfeeding for babies
	Prevention of mother-to-child transmission of HIV (PMTCT)	• Prevention of HIV and STIs and avoiding unintended pregnancy amongst women who are HIV infected • PMTCT through antiretroviral therapy and safer infant feeding practices
	Malaria control	• Intermittent preventive treatment for malaria in pregnancy (IPTp) and insecticide treated bednets (ITN) for malaria
	Immunisation	• Tetanus Toxoid vaccination (at least 2 doses) for pregnant women

Key findings The fate of African newborns, mothers and children is closely linked

ARE WE MOVING TOWARDS THE GOALS?	SOLUTIONS FOR NEWBORN DEATHS?	THE COST?
The Millennium Development Goals (MDGs) have galvanized much attention but action is not happening fast enough in Africa. Addressing newborn health is a catalyst for improving maternal and child health and accelerating progress towards MDG 4 (child survival), MDG 5 (maternal health) and MDG 6 (HIV/AIDS, tuberculosis and malaria).	Two thirds of newborn deaths could be prevented with high coverage of essential maternal newborn and child health (MNCH) packages already in policy, as long as some specific newborn care aspects are strengthened. More than 2,000 newborn lives can be saved every day. A continuum of care linking maternal, newborn and child health interventions through the lifecycle and between health service delivery levels is the way forward.	The cost is affordable – an additional US$1.39 per capita, and two thirds of this goes toward general MNCH care. Investing in newborn care also benefits mothers and older children.

Key opportunities in policy and programmes to save newborn lives

- Promote delay of first pregnancy until after 18 years and spacing of each pregnancy until at least 24 months after the last birth
- Prevent and manage HIV and STIs especially among adolescent girls

- Increase the quality of ANC ensuring women receive four visits and all the evidence based interventions that are part of focused ANC
- Promote improved care for women in the home and look for opportunities to actively involve women and communities in analysing and meeting MNCH needs

- Increase availability of skilled care during childbirth and ensure skilled attendants are competent in essential newborn care and resuscitation
- Include emergency neonatal care when scaling up emergency obstetric care
- Promote better linkages between home and facility (e.g. emergency transportation schemes)

- Develop a global consensus regarding a PNC package
- Undertake operations research in Africa to test models of PNC, including care at the community level in order to accelerate scaling up

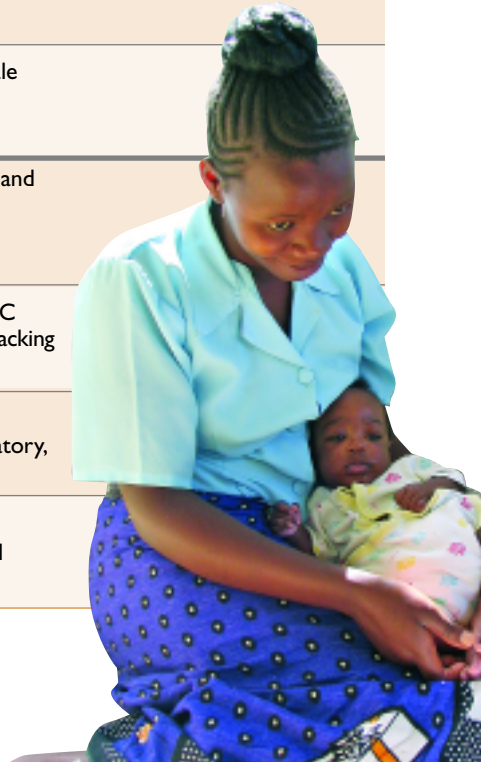
- Adapt IMCI case management algorithms to address newborn illness and implement this at scale
- Ensure hospitals can provide care of LBW babies including KMC and support for feeding
- Strengthen community practices for newborn health

- Address anaemia in pregnancy through iron and folate supplementation, hookworm treatment and malaria prevention
- Review and strengthen policy and programmes to support early and exclusive breastfeeding, adapting the *Global Strategy for Infant and Young Child Feeding*

- Increase coverage of PMTCT and improve integration of PMTCT, especially with ANC and PNC
- Use opportunities presented by expanding HIV programmes to strengthen MNCH services (e.g. tracking of women and babies especially in the postnatal period, better laboratory and supply management)

- Increase coverage of ITN and IPTp to address malaria during pregnancy
- Use the current momentum of malaria programmes to strengthen MNCH services (e.g. laboratory, supplies and social mobilisation)

- Accelerate the elimination of maternal and neonatal tetanus
- Use the solid management and wide reach of immunisation programmes to strengthen MNCH services (e.g. social mobilisation, linked interventions, and monitoring)



Actions

for POLICY makers in Africa

The opportunities and gaps for MNCH are different in every country, but the following themes are evident among the countries making MNCH gains:

Accountable leadership: Countries making an effort to reduce newborn mortality can credit accountable leadership and good stewardship as important factors in setting direction and in maintaining attention and action. Good leadership maximises teamwork and the use of resources within a country, state or organisation, and it also attracts investment from outside sources with more opportunities for harmonisation.

Bridging national policy and district action: Almost all of the countries that are making progress have poverty reduction strategy papers and health sector reform plans. Too often there is a gap between strategic planning at the national level and action in districts. Policy makers in Tanzania, for example, have recognised this challenge, and have delegated responsibility to district management teams which allocate the local budget according to the burden of disease, resulting in more effective spending on child survival and steady increases in coverage of essential interventions.

Community and family empowerment: Much of the care for mothers and their newborns and children occurs at home. Women and families are not merely bystanders. If empowered, they can be part of the solution to save lives and promote healthy behaviours, including seeking skilled care in childbirth and danger sign recognition and care seeking. Creative community solutions, such as emergency transport and pre-payment schemes can be effective.

Demonstrated commitment to:

- *Making policy* that supports increasing coverage of MNCH essential interventions and packages. The African Road Map for reducing maternal and newborn mortality and the WHO/UNICEF/World Bank regional child survival framework present opportunities to accelerate progress for MDGs 4 (child survival) and 5 (maternal health) in every country in Africa, and contribute to the attainment of MDG 6 on reduction of malaria and HIV/AIDS. However this requires consistent, high level focus in 5 and 10 year plans.
- *Mobilising resources* and increasing investment in health, as per the Abuja target for government health spending. In addition, specific attention is required to protect the poor, particularly from the potentially catastrophic costs of obstetric emergencies.
- *Maximising human resources* including the use of community workers where appropriate.
- *Measuring progress* and linking data to decision making. This involves considering equity in service delivery as well as accountability and public ownership.

Actions

for PROGRAMME managers and professionals in Africa

Successful plans that lead to action require both good policy and good politics. Effective planning involves two parallel and interdependent processes as follows:

A participatory political process identifies and engages key stakeholders, including representatives of women and community groups. This process promotes an enabling policy environment, with in ownership of a plan and increases the likelihood of raising the resources needed for implementation.

A systematic management and prioritisation process allows for effective allocation of scarce resources. This can be applied through the following four steps:

Step 1. Conduct a situation analysis for newborn health in the context of MNCH.

Step 2. Develop, adopt and finance a national plan embedded in existing national policy, which involves phased approaches to maximise lives saved now as well as overall health systems strengthening over time.

Step 3. Implement interventions and strengthen the health system, with particular attention to human resources. For example, Africa needs an additional 180,000 midwives in the next 10 years to scale up skilled care during childbirth. Comprehensive human resource plans need to focus not only on training but also on retaining and sustaining existing staff.

Step 4. Monitor process and evaluate outcomes, costs and financial inputs. If newborn deaths are significantly underestimated now, assessment of progress may be misleading. The quality of data, frequency of data collection and the use of data for decision making is crucial. In addition to counting deaths, tracking of the coverage of essential interventions and financial inputs are crucial.

Actions

for PARTNERS to help accelerate progress in Africa

Partnership is integral to effective action. Partners have an essential role to play in saving lives through the following principles:

Principle 1. Increase funding for essential MNCH interventions. These interventions, which save mothers, babies and children, are highly cost effective. Investment is the responsibility of rich and poor countries, international donors and leaders within countries. An increase in funding by the order of 3 to 5 fold is required.

Principle 2. Keep governments in the driving seat and support national priorities, along with the principles of the Paris Declaration: one plan, one coordinating mechanism, and one monitoring system to decrease the management and reporting load.

Principle 3. Improve partner harmonisation. Donor convergence allows for flexibility and better decision making at the country level. This is the founding principle of the Partnership for Maternal Newborn & Child Health (PMNCH).

Africa's newborns are Africa's future

Until recently, newborn deaths in Africa have gone uncounted. New attention to Africa's newborns – the most vulnerable members of society – provides opportunities to accelerate action to reduce newborn deaths but also to strengthen MNCH services and integrate more effectively with existing programmes.

Increasing the coverage of essential interventions to 90 percent could save the lives of up to 800,000 newborns in Africa every year. The cost is very affordable at an extra US$1.39 per capita and this investment would also save the lives of many mothers and children.

Honourable Ambassador Dr. Mongella, the president of the Pan African Parliament has said:

"Now reaching every woman, baby and child in Africa with essential care will depend on us, the users of this publication. We all have a role to play as government officials to lead, as policy makers to guarantee essential interventions and equity, as partners and donors to support programmes, as health workers to provide high quality care, and as humans to advocate for more action for Africa's newborns, mothers and children."

Call for action to save Africa's newborns

Call for action at the national level

- By the end of 2007, produce and publish a plan of action to reach national neonatal survival targets, linked to the Road Map for the reduction of maternal and newborn mortality and other relevant strategies for reproductive health and child survival. This plan should be based on situation analyses, with a baseline and target neonatal mortality rate (NMR), with a foundation of evidence based interventions and specific strategies that reach the poorest families.
- Finance the implementation of the plan of action by identifying and mobilising internal resources, seeking external support where necessary, and ensuring the poor are not missed in scale up efforts.
- Implement the plan within maternal health and child health programmes, with defined targets and timelines, phasing progress towards universal coverage of essential interventions.
- Monitor progress and publish results regularly. Link to existing monitoring processes such as health sector reviews, with the involvement of civil society. Count every newborn and make every newborn count.

Call for action at the international level

- Include NMR as an indicator for MDG 4, with a target of 50 percent reduction between 2000 and 2015. Publish national NMR data in global reports on an annual basis.
- Leverage resources to meet the additional needs identified by countries in order to achieve high coverage of interventions.
- Advocate for partner and donor convergence at country level, as promoted by the Partnership for Maternal Newborn & Child Health (PMNCH), in order to increase efficiency and reduce the reporting load on national governments.
- Invest in health systems research to answer the "how" questions for saving newborn lives, with special focus on previously overlooked areas such as stillbirths, and non-fatal outcomes around the time of birth.

Acronyms

AIDS	Acquired immune deficiency syndrome	MDG	Millennium Development Goal
ANC	Antenatal care	MICS	Multiple Indicator Cluster Surveys
CHW	Community health worker	MMR	Maternal mortality ratio
DHS	Demographic and Health Survey	MNCH	Maternal, newborn and child health
EmOC	Emergency obstetric care	NMR	Neonatal mortality rate
FGM	Female genital mutilation	PMNCH	Partnership for Maternal, Newborn and Child Health
HIV	Human immunodeficiency virus	PMTCT	Prevention of mother-to-child transmission of HIV
IMCI	Integrated Management of Childhood Illness	PNC	Postnatal care
IMR	Infant mortality rate	U5MR	Under-five mortality rate
IPTp	Intermittent preventive treatment for malaria in pregnancy	UNFPA	United Nations Population Fund
ITN	Insecticide treated bednet	UNICEF	United Nations Children's Fund
KMC	Kangaroo Mother Care	USAID	United States Agency for International Development
LBW	Low birthweight	WHO	World Health Organization

Language for counting mothers, newborns and children

Mothers

Maternal mortality ratio is the number of maternal deaths from pregnancy-related causes per 100,000 live births.

Stillbirths

Stillbirth rate is the annual number of babies born dead after 28 weeks of gestation (late fetal deaths) per 1,000 total births.

Newborns

Neonatal mortality rate is the number of neonatal deaths (deaths in the first 28 days of life) per 1,000 live births.
Early neonatal deaths are those that occur in the first week of life.
Late neonatal deaths are deaths occurring between the second and fourth weeks, i.e. from days 7 to 28.
Newborn refers to the newborn baby and does not have a specific time period definition, but is often assumed to refer to the first month of life.

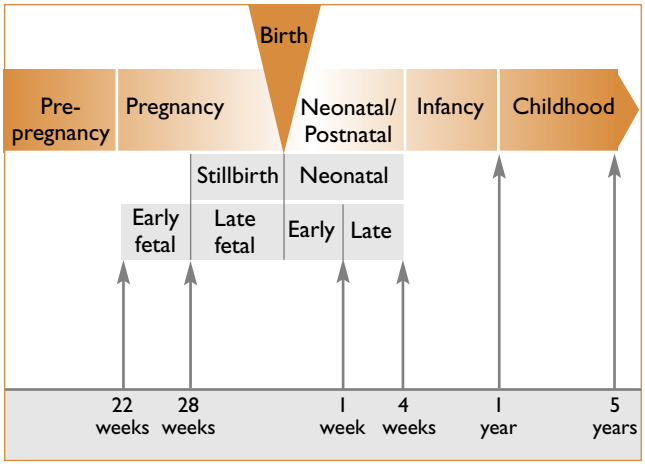
Small babies

Low birthweight refers to babies born with a birthweight of less than 2,500 grams. This can be due to:

- *Poor growth in utero* – babies who are born after the full number of weeks of gestation (37 to 42 weeks gestation, or term births) but are smaller than expected (small for gestational age). This may be due to a number of causes, including small maternal size, obstetric causes (such as twins or multiple pregnancy, hypertension in pregnancy), infections, poor maternal nutrition or overwork.
- *Preterm or born too early* – babies who are born before the normal 37 weeks of gestation. Preterm babies generally have a much higher risk of death than babies born at full term who are of normal size, and a risk that is 3 to 10 times higher than full term babies who were growth restricted.
- *Some babies are both preterm and have poor growth in utero* – this applies to many twins or other multiple births. Malaria in pregnancy can cause preterm birth or growth restriction in utero, or both.

Children

Under-five mortality rate is the annual number of children who die between birth and five years of age per 1,000 live births.



Time periods

The *postnatal* period is the time after birth and includes both mother and baby. The exact time period is not well defined but in this book we will assume that it is 6 weeks after birth. The *postpartum* period describes the same time, but refers specifically to the mother. The term perinatal can be confusing as it may refer to a variety of time periods depending on the definition used. *Perinatal* is also used to refer to some, but not all causes of neonatal deaths in the *International Classification of Diseases*; not including sepsis, pneumonias or congenital abnormalities. Hence this publication will avoid the use of the word perinatal and will refer to the actual time period, outcome (e.g., stillbirth or neonatal death), or specific cause of death.

Detailed definitions and notes on the definitions, data sources and limitations can be found in the data notes on page 226.